

Keynotes

May-June 2002

Atlantic Oceanographic and Meteorological Laboratory

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Summit Reviews Advances Since Hurricane Andrew

Hurricane Andrew was the costliest storm to strike the United States, causing 30 billion in damages. August 2002 marks the ten-year anniversary of its devastating south Florida landfall. To commemorate the event, Florida International University hosted the "Hurricane Andrew 10-Year Anniversary Summit" on May 30-31, 2002 to review what the south Florida community has learned over the last decade about preparing for and coping with disaster.

The summit served as a forum for policy-makers, emergency management officials, researchers, educators, and the community at large to examine and assess the changes brought about by Andrew. Discussion was focused on six theme areas: science and technology, government response, engineering and design, the social and economic impacts, vulnerability and mitigation, and education and outreach.

Scientists from AOML, in particular, the Hurricane Research Division, as well as Scott Gudes, Deputy Under Secretary for NOAA, participated in the science and technology theme sessions. Panel discussions centered on advancements made in understanding the track, intensity, and structure of hurricanes, leading to better analysis and forecasting techniques, and new technological applications such as surface wind analysis used to determine the intensity and radial extent of maximum sustained winds. These advances will assist forecasters and emergency management officials to better assess and manage the next tropical weather system that comes ashore in south Florida.

NOAA Releases Forecast for 2002 Hurricane Season

NOAA hurricane experts released their forecast for the 2002 Atlantic hurricane season at a press conference in Miami, Florida on May 20th. Speaking from the National Hurricane Center, experts said the June 1-November 30 season would likely have normal to slightly above normal levels of activity. The forecast indicates the potential for nine to 13 tropical storms, six to eight storms developing into hurricanes, with two to three classified as major hurricanes (category 3 [winds at least 111 mph] or higher on the Saffir-Simpson scale).

Key climate patterns guiding this year's expected activity are long-term patterns of tropical rainfall, air pressure, and higher temperatures in the Atlantic Ocean that are more conducive to hurricane development. Warmer ocean temperatures, coupled with lower wind shear in the region of hurricane development, have historically generated higher numbers of major hurricanes.

A normal Atlantic hurricane season typically has an average of 10 tropical storms, of which six reach hurricane strength with two classified as major. Above-normal activity has been observed for six of the last seven Atlantic hurricane seasons. Residents of Gulf and Atlantic coast states were advised to be prepared throughout the season and to take the necessary precautions to protect life and property. Residents were also urged to guard against complacency in light of the fact that the United States has not been impacted by a landfalling hurricane for the past two years.

NOAA's annual hurricane forecast represents the combined expertise of scientists from the National Hurricane Center, Climate Prediction Center, and AOML's Hurricane Research Division (HRD). HRD meteorologists Christopher Landsea and Stanley Goldenberg have served on NOAA's panel of hurricane experts since NOAA released its first seasonal forecast in 1999.

An updated forecast is expected in early August as the peak of the season begins.



It's back! The Atlantic basin hurricane season began June 1st.

Atlantic Basin 2002 Storm Names:

Arthur	Dolly	Gustav	Josephine	Marco	Paloma	Teddy
Bertha	Edouard	Hanna	Kyle	Nana	Rene	Vicky
Cristobal	Fay	Isidore	Lili	Omar	Sally	Wilfred



AOML is a research laboratory of NOAA's Office of Oceanic and Atmospheric Research located on Virginia Key in Miami, Florida



VADM Lautenbacher Meets NOAA's Miami Employees

NOAA Administrator VADM Conrad Lautenbacher visited Virginia Key in Miami, Florida, on May 20th for an All-Hands Meeting of NOAA and NOAA-affiliated employees. More than 125 representatives from the Office of Oceanic and Atmospheric Research, National Weather Service, National Marine Fisheries Service, National Ocean Service, and the National Environmental Satellite, Data and Information Service attended the meeting held at the University of Miami's Rosenstiel School auditorium.



Lautenbacher discussed his philosophy for NOAA's success and growth as an agency and described his background in the U.S. government. He was well received and remarked candidly on topics ranging from basic research and base funding to NOAA's role in homeland security. Lautenbacher reminded employees that the foundation of NOAA's future success was based upon working together across line offices to present a united approach to funding and resource opportunities.

The meeting closed with Lautenbacher emphasizing to employees that NOAA was their organization. He said he looked forward to unveiling comments and suggestions to improve NOAA put forth by employees when he first assumed office.



Adept at "putting out fires," AOML Director Kristina Katsaros and Deputy Director Judy Gray demonstrate how it's really done during a fire drill conducted at AOML on April 23rd.

Hurricane Scientists Participate in Taiwan Typhoon Meeting

In April 2002, scientists from AOML's Hurricane Research Division (HRD) traveled to Taipei, Taiwan to attend the "Second Workshop on Landfalling Typhoons in the Taiwan Area." Sim Aberson, Hugh Willoughby, and Michael Black, along with Kerry Emanuel from the Massachusetts Institute of Technology and Wen-Chau Lee from the National Center for Atmospheric Research, made presentations and spoke with Taiwanese government officials and scientists about collaborating to help with efforts to mitigate the typhoon problem.

Taiwan is impacted annually by an average of nearly four typhoons. In 2001, they were affected by nine storms and incurred great economic losses. More than 200 people drowned due to flooding by several meters of rainfall from single typhoons.

The meetings were successful and laid the foundation for what promises to be a long-term relationship with scientists and forecasters from Taiwan. The Taiwanese are trying to establish a National Typhoon Research Center to support the work of its Central Weather Bureau. They are also attempting to begin a typhoon research and reconnaissance program with a jet aircraft similar to NOAA's Gulfstream-IV jet. Michael Black stated, "I believe we have much to learn from their scientists and forecasters as well. They have both the knowledge, ability, and infrastructure to build on what has already become a world-class research and operations center, similar to HRD and the National Hurricane Center."



Hurricane Research Division scientists Sim Aberson, Hugh Willoughby, and Michael Black in Taipei, Taiwan.

VOS Atlantic Cruises Successfully Completed

May was a busy month for the high-density expendable bathythermograph (XBT) program of AOML's Physical Oceanography Division (PhOD). Scientists successfully completed three cruises or "runs" aboard commercial container ships where they deployed XBTs, small probes that measure water temperature as they fall towards the ocean floor, and Argo profiling floats (drifting buoys that measure temperature and salinity).

The ships are all participants in NOAA's Volunteer Observing Ship (VOS) program. VOS data-gathering activities are an integral part of NOAA's efforts to improve its ability to predict climatic fluctuations by monitoring and understanding how the ocean responds to changes in surface temperature.

The VOS Atlantic cruises for the AX7, AX8, and AX10 lines are undertaken four times annually. PhOD scientists successfully completed the following cruises in May:

- Robert Roddy sailed aboard the *Lykes Energizer* from May 2-23, 2002 for the AX8 run from Capetown, South Africa to Philadelphia, Pennsylvania where he deployed approximately 264 XBTs and six Argo profiling floats.
- Ulises Rivero sailed aboard the *CSX Hawaii* from May 17-21, 2002 for the AX10 run from Newark, New Jersey to San Juan, Puerto Rico where he deployed 125 XBTs. While on this cruise, Rivero trained Ariel Hernan Troisi in the use of SEAS (Shipboard Environmental data Acquisition System) XBT equipment and float deployment. Troisi is a Captain in the Argentine Navy and is currently the director of CEADO, the Argentine Oceanographic Data Center. CEADO will conduct future high density cruises on the AX18 run from Cape Town, South Africa to Buenos Aires, Argentina.
- Craig Engler sailed aboard the *Lykes Commander* from May 23-June 1, 2002 for the AX7 run from Barcelona, Spain to Miami, Florida where he deployed approximately 228 XBTs.

St. Croix CREWS Station Successfully Installed

Scientists and technicians from AOML's Ocean Chemistry Division successfully installed a new CREWS (coral reef early warning system) station at the St. Croix, U.S. Virgin Islands Salt River Bay National Historical Park and Ecological Preserve in June 2002. CREWS stations continually monitor oceanographic and meteorological conditions in coral reef areas and are a component of NOAA's Coral Reef Watch program. They use artificial intelligence techniques and alert researchers when conditions of marine environmental stress conducive to or predictive of coral bleaching episodes are detected.



The CREWS station installed in St. Croix, U.S. Virgin Islands will be part of a network that monitors coral reef environmental conditions.

Diversity Seminar

Travels through
Cambodia: "Wat" I Did On
My Spring Vacation

*Bring your lunch and enjoy
a slide show of
Phnom Penh and Angkor Wat*

June 18, 2002

12 Noon

Sim Aberson

First-floor Conference Room

Oceanographers Assist Racing Teams in Yacht Competition

Yacht teams competing in the Volvo Ocean Race completed leg 5 of the around-the-world boating event as they sailed into Miami, Florida on March 27, 2002. During their stopover in Miami, crew members from the eight racing teams, as well as meteorologists, navigators, and officials associated with the race, visited AOML. Drs. Gustavo Goñi and Joaquin Triñanes, oceanographers with AOML's Physical Oceanography Division, made a presentation about some of AOML's latest web-based ocean data products. AOML is host to the Caribbean CoastWatch node, the Global Ocean Observing System Center, and the Global Drifter Data Center, all of which provide a wealth of information on real-time ocean currents, sea surface temperature, wind speed and direction. The visit was covered by local, national, and international press and news agencies.

Race participants showed great interest in the work performed at AOML and stated that real-time oceanographic and meteorological data found on the web was critical to their success. The location of major ocean currents and meanders, eddies, and jets is oftentimes a decisive factor in determining the winner of a race leg or the race itself. NOAA/AOML's web pages were among the sites chosen by crew members before the race began as a source of real-time data. While at AOML, crew members had a chance to navigate the web sites and learn how to use the experimental data to locate ocean currents such as the Gulf Stream, which played a key role during leg 6 of the race from Miami to Baltimore, Maryland.

Interaction between crew members and Goñi and Triñanes continued for several days following the visit to AOML. Triñanes explained, "We were invited to visit them at the Volvo Ocean Race Village. They showed us around, including their logistical operations for meteorology and oceanography. This is a very competitive sport and each team had its own scientific personnel. There is no information exchange between rival teams." Triñanes added, "The most exciting moment of the visit was when we were invited to go sailing for a few hours with members of the Amer Sports One team. Although the day was very windy, conditions were perfect to briefly experience sailing at its best. We were both allowed to steer the boat." Goñi and Triñanes were also invited to attend the start of leg 6 aboard a yacht, along with sponsors, relatives, and friends of one of the teams.

The Volvo Ocean Race began in Southampton, United Kingdom on September 23, 2001 and ended June 9, 2002 in Kiel, Germany. The grueling event covered 32,700 nautical miles, circumnavigating the world by sailing with the prevailing winds. Port calls included stops in South Africa, Australia, New Zealand, Brazil, the United States, France, and Sweden. Additional information about the race can be found at www.volvooceanrace.com.

"I considered this a great learning experience," said Goñi. "I never imagined that our work could be used for a sporting event and was surprised that we made the sports section of some newspapers and overseas sports broadcasts that covered the teams' visit to AOML. We met olympians and people who have sailed around the world several times."



Gustavo Goñi and Joaquin Triñanes aboard the Amer Sports One racing yacht with team members.



Leg 6 of the Volvo Ocean Race begins as yacht teams depart Miami on April 14th en route to Baltimore, Maryland.

Ecuadorians Apprised of El Niño Conditions

David Enfield, an oceanographer with AOML's Physical Oceanography Division, visited Ecuador during the week of May 13-17, 2002 to apprise Ecuadorians of the probability of encountering moderate El Niño conditions in the latter part of 2002. Enfield's El Niño-Southern Oscillation "outreach" activities included television and radio broadcasts, briefings with scientists and government officials, and presentations before the general public. Enfield conveyed the message that flooding and other impacts suffered by Ecuador in March-April 2002 were probably the early onset of El Niño conditions and that a moderate El Niño was expected to occur between fall 2002 and spring 2003.

Scientist Honored as Grand Marshall of Ceremonies

Evan Forde, an oceanographer with AOML's Computer Networks and Services Division, served as Grand Marshall of the MAST Academy's (Maritime and Science Technology High School) graduation ceremonies on June 13, 2002. The event was held at the Guzman Theatre in downtown Miami.

As graduates stepped forward to received their diplomas, Forde recognized many of them as either current or recent AOML interns and volunteer employees. A subsequent check of AOML's outreach records revealed that 13 of the 129 MAST Academy's 2002 graduates (10%) had worked at AOML in some capacity during their four years at the school. Since part of the rationale for locating the MAST Academy on Virginia Key was to provide students access to scientists involved in actual research, this statistic reveals that the strategy has been successful and that AOML is an active partner in science education for students in its community.

MAST Academy is an innovative, nationally-recognized school of choice for students who have a strong interest in marine-related disciplines. It has an enrollment of 550 students with high academic and personal development expectations. Forde has been a supporter and proponent of the school since the days of its precursor, the Inner City Marine Project, in 1984.

Students Experience the World of NOAA Science

Two high school students from Rhode Island visited AOML during the week of April 15th for an introduction to life as a NOAA scientist. Their visit to Miami was hosted by AOML Deputy Director Judy Gray, who has frequently made science presentations at their school. The visit was sponsored by the Block Island Maritime Institute.

During their week at AOML, Chris Buol and Steve Cappadona worked with Joseph Bishop of the Acoustics Research Group to build instrumentation used in coastal research and conducted a test deployment of the equipment off of Key Biscayne. They also went snorkeling in the Florida Keys National Marine Sanctuary with Bill Valley (FKNMS) and Jules Craynock (AOML Diving Supervisor), had a tour of NOAA's Tropical Prediction Center with hurricane forecaster Lixion Avila, toured the Everglades National Park, and visited the Miami Seaquarium.

For fun, they went on a dinner cruise up the Miami River with Dr. Paul George, one of Miami's premier historians; took a speed boat ride off of Miami and Miami Beach; and visited CocoWalk and Bayside. Gray isn't sure that NOAA scientists typically pack so many activities into one week, but a good time was had by all.



Chris Buol, Steve Cappadona, and Judy Gray don glasses to view three-dimensional images of hurricanes.

School may be out of session for the next few months, but the learning is just beginning for many of AOML's 2002 summer interns. College and high school students recently joined the ranks of AOML's work force to provide technical support to AOML's three research divisions (Hurricane Research-HRD, Ocean Chemistry-OCD, and Physical Oceanography-PhOD) and its Computer Networks and Services Division (CNSD). Here is a listing of AOML's summer interns and their mentors:

Cooperative Institute of Marine and Atmospheric Studies (CIMAS):

Stephanie Bergman, Ohio State University	Mark Powell (HRD)
Shuka Daneshzadeh, Western Senior High School	Alejandra Lorenzo (CNSD)
Andrew Hagen, Gulliver Preparatory School	Frank Marks (HRD)
Diana Mancebo, Miami-Dade Community College	Alejandra Lorenzo (CNSD)
Adam McLoed, University of Miami	John Proni/Joseph Bishop (OCD)
Gretchen Keppler, University of Miami	Frank Marks (HRD)
Adrien Santiago, Michael Krop High School	Frank Marks (HRD)
Roger Simon, MAST Academy/University of Chicago	Frank Marks (HRD)
Krystal Valdes, University of Miami	Michael Black (HRD)

UCAR/SOARS (Significant Opportunities in Atmospheric Research and Science):

Shanna Pitter, Iowa State/Colorado State University	Shirley Murillo/Frank Marks (HRD)
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National Coastal Data Development Center

Oreon Pinkston, Florida A&M University	Michael Crane (NESDIS)
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PHASE (Practical Hands-On Application to Science Education):

Michael Ha, University of Florida	Alejandra Lorenzo (CNSD)
Chris Moberg, University of Wisconsin	Peter Black (HRD)
Marcelo Molina, MAST Academy/Penn State	Steve Feuer/William Barry (HRD)
Ariel Rodriguez, Florida State University	Thomas Carsey (OCD)
Robert William, Miami-Dade Community College	Steve Feuer (HRD)/Alejandra Lorenzo (CNSD)
Lenworth Woolcock, Florida International University	Neal Dorst (HRD)/Alejandra Lorenzo (CNSD)

Volunteers:

Gabriella Bello, Killian Senior High School	Maria Bello (NOAA/AOML Regional Library)
Edward Black, MAST Academy	Alberto Mestas-Nuñez (PhOD)
William Bredemeyer, Florida State University	Christopher Landsea (HRD)
Kristen Corbosiero, State University of New York	Michael Black (HRD)
Jessica Vazques, Miami Lakes Senior High School	Alejandra Lorenzo (CNSD)
Sabato Visconti, MAST Academy	Kelly Goodwin (OCD)



John Proni, Joyce Berkeley, Peter Black, Gladys Medina, and John Festa received years-in-service certificates at the AOML Awards Ceremony to commemorate 30 years of federal employment.

FEDERAL YEARS-IN-SERVICE AWARDS

The following individuals received years-in-service certificates at the AOML Awards Ceremony:

- | | |
|-----------|--|
| 5 Years: | Craig Engler
Silvia Garzoli
Gustavo Goñi
Kristina Katsaros
Michael Sam
Shari Yvon-Lewis |
| 10 Years: | Christian Labbe |
| 15 Years: | Robert Decker
Elizabeth Johns
John Kaplan
Nina Liebig
Lloyd Moore |
| 20 Years: | Yeun-Ho Daneshzadeh
Douglas Wilson |
| 25 Years: | Paul Dammann
Peter Ortner
Catherine Steward
Anne-Marie Wilburn |
| 30 Years: | Joyce Berkeley
Peter Black
John Festa
Gladys Medina
John Proni
Gary Soneira |
| 35 Years: | Robert Kohler
Dennis Mayer
Victor Wiggert |

Staff Achievements Celebrated at Awards Ceremony

AOML's annual awards ceremony was held June 5, 2002 to celebrate the achievements of staff members. Years-in-service certificates were also awarded to federal employees. AOML Director Kristina Katsaros and Division Directors Hugh Willoughby, Silvia Garzoli, and Peter Ortner awarded Certificates of Merit to the following individuals.

Evan Forde – in recognition of receiving a FY-2001 NOAA/OAR Research Employee of the Year Award

Robert Roddy – in recognition of receiving a FY-2001 NOAA/OAR Research Employee of the Year Award

Rik Wanninkhof – in recognition of receiving a 2002 NOAA Administrator's Award

Frank Marks – in recognition of receiving the NOAA Diversity Council's Spectrum Achievement Award

Alberto Mestas-Núñez – in recognition of receiving the NOAA/OAR Research Partner of the Month Award

Nina Liebig – in recognition of receiving a NOAA/OAR Employee of the Month Award

Sonia Otero, Nirva Morisseau-Leroy, and Nicholas Carrasco – in recognition of receiving the "Best Technology Transfer to Operations" Award at the NOAA Tech 2002 Conference

Frank Marks and Joseph Griffin – in recognition of receiving the "Best Wireless Application" Award at the NOAA Tech 2002 Conference

Howard Friedman – in recognition of his dedication and service as a charter member of the first NOAA Equal Employment Opportunity Council

Rik Wanninkhof – in recognition of receiving a NOAA/OAR FY-2001 Best Scientific Paper Award

Gustavo Goñi and Peter Black – in recognition of receiving a NOAA/OAR FY-2001 Best Scientific Paper Award

Michael Black – in recognition of receiving the Outstanding Achievement Award in Meteorology at the 24th National Hurricane Conference

John Kaplan – in recognition of receiving the American Meteorological Society's Banner I. Miller award for the best contribution to the science of hurricane and tropical weather forecasting published in a journal with international circulation

Christopher Landsea – in recognition of receiving an Editor's Award from the American Meteorological Society for his contributions to the journal *Monthly Weather Review*

Molly Baringer – in recognition of being elected by American Geophysical Union constituency to the position of Secretary of Physical Oceanography for the Ocean Sciences section

Yeun-Ho Daneshzadeh, Reyna Sabina, and Claudia Schmid – in recognition of ensuring the continuous flow of Argo data to the operational oceanographic research community

Congratulations to all of AOML's award recipients for your outstanding achievements!



John Kaplan, meteorologist with the Hurricane Research Division, receives an AOML Certificate of Merit from HRD Director Hugh Willoughby to commemorate receiving the American Meteorological Society's Banner I. Miller Award.

Congratulations

Jack Stamates, oceanographer with the Ocean Chemistry Division, received a M.S. degree in ocean acoustics from the Applied Marine Physics Division of the University of Miami's Rosenstiel School of Marine and Atmospheric Science in May 2002.

Jannette Perez, administrative specialist with the Office of the Director, graduated with a Bachelors of Arts degree in business management from St. Thomas University in May 2002.



Roberta Lusic, administrative assistant with the Physical Oceanography Division and a native of Croatia, became a United States citizen on May 20, 2002.



NOAA/AOML received a 2002 School to Career Business Partner Award for outstanding support and commitment to excellence in education from Miami-Dade County Public Schools' Office of School Reform. The award recognizes the efforts of AOML's Alejandra Lorenzo in promoting academic and educational programs at Hialeah High School.

Welcome Aboard

NOAA Corps officer LTJG Jeffrey Judas joins the staff of the Ocean Chemistry Division to assist with activities related to the South Florida Ecosystem Restoration Prediction and Modeling program and the Coral Health and Monitoring program.

Benjamin Kates joins the staff of the Physical Oceanography Division as a CIMAS associate to provide assistance to PhOD's field operations program. Ben is an avid yachtsman and a recent graduate of Florida International University. At AOML, he will maintain, calibrate, and prepare instrumentation systems and participate extensively in PhOD cruises aboard research and merchant vessels.

Farewell

Dennis Mayer, oceanographer with the Physical Oceanography Division and long-time AOML employee, retired in May 2002 after 35 years of federal service. Dennis and his family are relocating to the west coast of Florida where he will continue his oceanographic research with the University of South Florida.

Paul Reasor, meteorologist with the Hurricane Research Division, departed from AOML in May 2002 to accept a position with Colorado State University's Department of Atmospheric Science.

LCDR John Steger, manager of AOML's Global Ocean Observing System (GOOS) Center, completed his tour of duty at AOML on May 31, 2002. John's next tour of duty will be as Executive Officer of the NOAA ship *Ronald H. Brown*.

Brian Ward, oceanographer with the Ocean Chemistry Division, departed from AOML in April 2002 to accept a research position with the Woods Hole Oceanographic Institution in Woods Hole, Massachusetts.



Team AOML competed in the 2002 Corporate Run 5K road race/walk held at Bayfront Park on May 2, 2002. The race attracted more than 19,000 participants from corporations, government agencies, and financial institutions in the local Miami area. Dubbed "Florida's largest office party," all proceeds from the event were donated to the south Florida chapter of the Leukemia and Lymphoma Society.

Fifth and sixth grade students from the Kendall Christian School visited AOML on April 18th for a tour of the building and to learn about NOAA. AOML scientists made presentations about their research and spoke with the students about the importance of science and what NOAA is learning from its study of the ocean and atmosphere. The science outing was coordinated by Stanley Goldenberg, a meteorologist with AOML's Hurricane Research Division.



Travel

Jason Dunion attended the Sixth International Winds Workshop in Madison, Wisconsin on May 5-10, 2002.

Kristina Katsaros attended a meeting of the Earth System Science Applications Advisory Committee in Washington, D.C. on May 7-8, 2002.

Silvia Garzoli, Robert Molinari, Derrick Snowden, and Chunzai Wang attended a CLIVAR planning meeting in College Park, Maryland on May 13-14, 2002.

Robert Kohler attended a meeting of NOAA's High Performance Computing and Communications program in Charleston, South Carolina on May 13-16, 2002.

Hugh Willoughby, Mark Powell, and Stanley Goldenberg attended the 16th Florida Governor's Hurricane Conference in Tampa, Florida on May 22-24, 2002.

Robert Molinari attended the American Geophysical Union's Spring Meeting in Washington, D.C. on May 28-June 1, 2002.

Robert Black attended the American Meteorological Society's Conference on Cloud Physics in Ogden, Utah on June 2-7, 2002.

David Palmer attended a meeting of the Acoustical Society of America in Pittsburgh, Pennsylvania on June 2-8, 2002.

Gustavo Goñi and Joaquin Triñanes attended a meeting of the JASON-1 Science Working Team in Biarritz, France on June 8-13, 2002.

Rik Wanninkhof attended a Surface Ocean Lower Atmosphere Study Workshop in Amsterdam, the Netherlands on June 11-12, 2002.

Sim Aberson attended a NOAA Diversity Council Meeting in Silver Spring, Maryland on June 13-14, 2002.

Erica Van Coverden attended the Presidential Classroom program in Washington, D.C. on June 17-21, 2002.

Stanley Goldenberg was the main speaker for the hurricane season kick-off event at the Southeast River Forecast Center in Atlanta, Georgia on June 25, 2002.

Infrastructure Update Makes AOML a Cool Place to Work

An important component of AOML's air conditioning system, the cooling tower, recently failed after 17 years of service. A new cooling tower was installed in May 2002 to fortify the existing air-conditioning system. It will provide a viable backup for a more energy-efficient system to be installed and operating within eight to ten months.



Left: Photo of the 17-year old cooling tower rusting away on the roof of the AOML facility. **Right:** AOML's new cooling tower, prior to installation, ready to keep staff members cool and comfortable during the long, hot south Florida summer.

Homestead Receives Hurricane Andrew Plaque

A bronze plaque commemorating the tenth anniversary of Hurricane Andrew's south Florida landfall was dedicated on May 20, 2002 at the Biscayne National Park Visitor Center in Homestead, Florida. First Lady Columba Bush, wife of Florida Governor Jeb Bush and a resident of Miami-Dade County when Andrew struck, unveiled the plaque after recounting her experiences of Andrew.



Hail "Cookie," King of the Mangrove

The pond and surrounding mangrove on the northwest corner of the AOML facility provides a safe habitat for a variety of birds and reptiles. "Cookie" is an example of one of the larger-sized iguanas that lives in the mangrove. Although reclusive, he is occasionally seen swimming across the pond, sunning himself on a sturdy tree limb, or, as this photo suggests, strolling casually across the grass. Measured from snout to the tip of his tail, his length is estimated as being close to 5 feet (photo courtesy of Tsung-Hung Peng).



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